

SPECIFICATION: MARKUP COPY

BACKGROUND OF THE INVENTION

The present invention relates generally to a coupon ticket-issuing system, and more particularly to a method and a system for issuing and displaying coupon information supplied through a network and/or digital broadcasting.

As a known technique for acquiring accessing and downloading coupon information, it is known to make is to access to a server system from a portable telephone through a network to thereby download the coupon being displayed. The coupon is affixed with a disclosed in JP-A-2001-256388, a bar code is affixed to a coupon, which is then read by a barcode reader installed at a store. The barcode information assigned to the coupon is to be subsequently sent to the server system through the network to ascertain the authenticity of the coupon, as is disclosed in JP-A-2001-256388.

However, within the conventional technique described as mentioned above, it is impossible to effectuate management concerning the issue of coupons so that the coupons conform to such as issue of coupon in conformance with the desires of the users, or so that setting of the conditions for issuing the coupons on a user-by-user basis are specified.

COUPON TICKET ISSUING SYSTEM

Further, when a user has a plurality of coupons, the user has to make a decision as to their effective use thereof.

SUMMARY OF THE INVENTION

5 An object of the present invention is to provide a coupon information--issuing system which is capable of issuing coupon information ~~in conformance with the conditions corresponding to information~~ desired by a user while setting the conditions for

10 issuing the coupon information based in dependence on attributes of the user.

Another object of the present invention is to provide a coupon information--issuing system which allows a plurality of coupon information processed by a

15 user to be used with enhanced efficiency.

In view of the above and other objectives of the present invention, which will become apparent in as the following description proceeds, there is ~~provided~~ a system of such an arrangement is provided that in which, upon selection of certain coupon information by a user from advertisement-information-appended coupon information issued by a service provider, and upon satisfaction of the conditions for issuing the coupon information imposed by the service provider and the conditions for receiving the coupon information as required by the user, the selected advertisement-

25

information-appended coupon information is issued, ~~when the conditions for issuing the coupon information imposed by the service provider and the conditions for receiving the coupon information as required by the~~

5 ~~user are satisfied~~, whereon their issued advertisement-information-appended coupon information ~~as issued~~ is sent to a receiver of the user. The present invention further teaches that it is further taught by the present invention that a plurality of coupon information stored

10 in the receiver or user terminal are sorted, on a coupon-by-coupon basis, in accordance with according to validity terms and/or discount rates, on a coupon-by-coupon basis.

Other objects, features and advantages of the invention will become apparent from the following description of the embodiments of the invention taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram showing ~~only~~

20 ~~schematically~~ a general configuration of a coupon information--issuing system according to an embodiment of the present invention.

Figure 2 is a view showing a system configuration of the coupon information--issuing ~~and~~

25 ~~using~~ system according to an embodiment of the present invention.

Figure 3 is a functional block diagram

showing schematically ~~the~~ structure of a service--
providing server employed in the system shown in
Fig. 2.

Figure 4 is a functional block diagram
5 showing schematically athe structure of a user's
digital television employed in the system shown in
Fig. 2.

Figure 5 is a functional block diagram show-
ing schematically athe structure of a user's portable
10 telephone employed in the system shown in Fig. 2.

Figure 6 is a flow-chart ~~for~~ illustrating a
processing procedure ~~of~~ for storing coupon information
separately from advertisement information ~~when~~
~~reception of~~ after coupon information attached to
15 advertisement_ information appended coupon information
is received by the user's digital television.

Figure 7 is a view showing, by way of
example, a screen image generated upon reception by the
user's digital television of the advertisement-
20 information appended coupon information appended to
advertisement information by the user digital
television.

Figure 8 is a view showing, by way of
example, images of advertisement information and coupon
25 information, respectively, which result from separation
or division of advertisement information appended
coupon information from advertisement information as
shown on by the user digital television.

Figure 9 is a flow-chart ~~for~~ illustrating a
processing procedure ~~for~~ the terminating issue of coupon
information when the issued number thereof as issued
exceeds a predetermined value.

5 Fig. 10 is a view showing a table whose ~~the~~
~~contents of which are set up by a service provider as~~
the conditions set up by a service provider for issue
of coupon information.

Figure 11 is a flow-chart ~~for~~ illustrating a
10 processing procedure ~~of~~ for issuing ~~the~~ coupon
information only when the conditions for receiving the
coupon information are satisfied.

Figure 12 is a table showing, by way of
example, the conditions for receiving the coupon infor-
15 mation.

Figure 13 is a flow-chart illustrating a
processing procedure in athe case ~~wherein~~ which coupon
information is issued in a number permissible for the
user.

Figure 14 is a flow-chart ~~for~~ illustrating a
20 processing procedure for issuing family-oriented
~~orientated~~ coupon information only to the
representative of a family without issuing ~~in duplicate~~
information to ~~the~~ any other member of the family.

25 Figure 15 is a table showing, by way of
example, family information of the user.

Figure 16 is a table showing family infor-
mation concerning children of the user.

Figure 17 is a flow-chart ~~for~~ illustrating a processing procedure for updating only the items that are required to be altered upon reissue of coupon information issued on a previous occasion~~similar to that issued once~~.

Figure 18 is a view showing, by way of example and respectively, coupon information tables before and after updating of conditions, ~~respectively~~.

Figure 19 is a flowchart ~~for~~ illustrating a processing procedure for displaying with priority coupon information in an ascending order determined by the limits of the validity terms~~limits~~.

Figure 20 is a view showing, by way of example, a table that is referenced uponwhen sorting of the coupon information takes place.

Figure 21 is a view illustrating examples of the coupon information displayed on an image screen of a portable telephone after sorting the coupon information in an ascending order reflecting the~~final time~~ limits ~~order of the~~ validity terms and in a descending order reflecting discount rate values of~~discount rates~~, respectively.

Figure 22 is a flow-chart ~~for~~ illustrating a processing procedure for displaying concurrently on a ~~single~~ image screen the coupon information chosen from a plurality of coupon information which can be used in combination, if available, ~~among a plurality of coupon information~~.

Figure 23 is a view showing, by way of example, screen images of coupon information which can be used in combination.

Figure 24 is a flow-chart ~~for~~ illustrating a processing procedure for displaying coupon information until the remaining number of times coupon information can be displayed becomes zero.

Figure 25 shows a table indicating a state preceding ~~the~~ display~~ing~~ of the coupon information and a table indicating a state succeeding to displaying of the coupon information.

Figure 26 is a view showing, by way of example, a screen image of ~~the~~a portable telephone in which the remaining number of the coupon information is indicated.

Figure 27 is a flow-chart ~~for~~ illustrating a processing procedure for displaying ~~repetitively~~the coupon information any desired times until the validity term has become invalid.

Figure 28 is a flow-chart ~~for~~ illustrating a processing procedure for displaying alternately the coupon information and the ID information on an image screen of ~~the~~a portable telephone.

Figure 29 is a table showing ID information of the user.

Figure 30 is a view illustrating examples of screen images ~~of the~~displayed on a portable telephone ~~on the presumption that~~when the coupon information is

displayed as a front image with the ID information being displayed as a second image.

Figure 31 is a flow-chart for illustrating a processing procedure for displaying alternately the advertisement information and the coupon information on an image screen of the portable telephone.

Figure 32 is a view illustrating examples of screen images of the displayed on a portable telephone on the presumption that the when advertisement information is displayed as a front image with the coupon information being displayed as a second image.

DESCRIPTION OF THE EMBODIMENTS

The present invention will be described in detail in conjunction with reference to what is presently considered as the preferred or typical embodiments thereof of the invention by and with reference to the drawings.

Embodiment 1

Figure 1 is a block diagram showing generally and schematically a configuration of a coupon information issuing system according to an exemplary embodiment of the present invention. Referring to the figure, a television shop 101 may be, for example, an enterprise which is in charge of issuing advertisement information to which is appended with coupon information. Hereinafter, this information will be referred to as the advertisement-

information-appended coupon information only for the convenience of description. It should, however, be appreciated that the same information may equally be termed the coupon-information-appended advertisement information. The advertisement-information-appended coupon information as issued is sent to a service provider 102. The service provider 102 may be, for example, a broadcasting station which broadcasts the advertisement-information-appended coupon information received from the television shop 101 to a user digital television receiver 103 designed for receiving the advertisement-information-appended coupon information from the service provider 102 by making use of the television broadcast receiving function. In the user digital television 103, the advertisement information and the coupon information are separated from each other and stored individually. The coupon information received by the digital television 103 may be transferred to a user portable telephone 104 by radio. The portable telephone 104 is one ~~sort of~~ form of terminal apparatus possessed by the user.

Figure 2 is a view showing a system configuration of a coupon information issuing and using system according to an embodiment of the present invention. Connected to the service providing server service-providing server designated by numeral 201 in this figure are databases 202, 203 and 204 in which advertisement-information-appended coupon

information A, advertisement-information-appended coupon information B and advertisement-information-appended coupon information C, all of which have been presented-provided by a plurality of enterprises, are separately stored, respectively. The individual coupon information databases 202, 203 and 204 may be stored in a single hard-disk drive system. The service-providing serverservice-providing server 201 is capable of performing transactions of information with a user

10 digital television 205 through the medium of a digital broadcast network and/or a telecommunication line. ~~It is assumed that a database 206 destined for storing the advertisement information and a database 207 destined for storing the coupon information are provided in~~

15 ~~association with the user digital television 205, wherein the advertisement information-appended coupon information stored, for example, in the database 202 connected to the service-providing server 201 and sent from the latter to the user digital television 205 is stored in the databases 206 and 207 after having been being separated into the advertisement information and the coupon information, respectively~~The advertisement-information-appended coupon information that has been stored, for example, in the database 202 connected to

20 the service-providing server 201, and that has been sent from service-providing server 201 to the user digital television 205, is separated into advertising information that is stored in database 206 and coupon

information that is stored in database 207, both databases of which are located in digital television 205. In the case of the example illustrated in Fig. 2, the advertisement information is stored in the database

5 206 while the coupon information is stored in the database 207. Additionally provided in association with the user digital television 205 is a database 208 which is destined for storing for storage of ID information. It is presumed that the user digital television 205 now under consideration is capable of performing transaction of information with a user portable telephone 209 through the medium of a radio system. In a manner similar to the incorporation of

10 databases provided in association with the user digital television 205, the user portable telephone 209 incorporates therein a database 210 for storing the advertisement information, a database 211 for storing the coupon information 211 and a database 212 for storing the ID information, similarly to the databases

20 ~~provided in association with the user digital television 205.~~ At this juncture, it should be mentioned that the ID information stored in the database 208 for the user digital television 205 differs in general from the ID information stored in

25 the database 212 for the user portable telephone 209 and that these ID information can-not be rewritten by the user. Ordinarily, each item of the first-mentioned ID information stored or contained in the database 208

is composed of a combination of a user code and a membership ID number for ~~discriminative-identification~~ of the user registered in the digital television shop system and user's attribute information, whereas the ~~second-mentioned-ID~~ information stored in the database 212 for the user portable telephone 209 is ~~constituted by-comprised of~~ a combination of the telephone number and the user's attribute information. ~~Incidentally, the information contained in the databases 210 to 212 may be stored in a storage incorporated in the user portable telephone 209.~~ Furthermore, in the system shown in Fig. 2, ~~there may also be adopted such a system configuration may be used in which the databases 210 to 212 are stored in respective hard disk drives.~~

15 These hard disk drives ~~which are connected to a portable telephone server installed by a portable telephone company~~ so that the portable telephone server can read out and send the information from the relevant hard disk drive connected thereto ~~to thereby send the information read out to be received by a user portable telephone which then receives the information.~~ At this juncture, ~~it should also be added that in both the user digital television and the user portable telephone,~~ the databases for storing the advertisement information and the coupon information, respectively, may be implemented in a single hard disk drive.

Figure 3 is a ~~functional~~-block diagram

showing generally a structure of the ~~service-providing~~

~~server-service-providing server 201~~ employed in the system shown in Fig. 2. As can be seen in the figure, the ~~service-providing-server-service-providing server~~ 201 includes a processor 301 on which an issue program 302 and a user identification program 303 can run. Further, a keyboard 304, a display device 305 and a hard disk 306 are connected to the processor 301 of the ~~service-providing-server-service-providing server 201.~~

10 The issue program 302 is ~~so-prepared-as-programmed to~~ determine to which of the user digital televisions and in what manner the advertisement-information-appended coupon information stored in the hard disk 306 is to be issued. ~~On the other hand, the~~ user identification program 303 ~~serves-for-confirming whether or not the user is the justifiable or-authorized person-on the basis of the ID information which is stored in the user digital television and/or the user portable telephone.~~

15 The keyboard 304, the display device 305 and the hard disk 306 are implemented and arranged similarly to those employed in the conventional personal computer.

Figure 4 is a block diagram showing a structure of the user digital television 205 employed in the system shown in Fig. 2. The user digital television 205 includes a processor 401 on which a display program 402, a use program 403 and a user identification program 404 can run. Connected to this user digital television 205 are a remote control device 405, a display device 406, a communication system 407 and a

hard disk drive 408. The display program 402 ~~serves~~
~~for determining in what the manner in which the~~
advertisement information, the coupon information and
the ID information stored in the hard disk drive 408
5 are to be displayed on the user digital television 205.
~~On the other hand, the use program 403 is put into~~
activated when the user determines how to make use
of the coupon information. The user identification
program 404 is designed to ~~perform user identification~~
10 ~~with identify users when the user or a third party~~
~~inputs a private ID number inputted by the user or a~~
~~third person (third party) to thereby allow the ID~~
information stored in the hard disk drive 408 to be
accessed. The remote control device 405 may be
15 ~~provided as the one dedicated to the digital~~
~~television. It should however be mentioned that a~~
portable telephone may be used in place of the remote
control device. ~~Of course, the~~ remote control device
of the type which is capable of manipulating operating
20 ~~the~~ digital television by radio may be employed.
Further, the display device 406 serves as a display
means for displaying ~~the whole~~ collected coupon
information as a single screen image or alternatively
~~in division as separate images~~, as the case may be. The
25 communication system 407 serves as ~~a transmitting means~~
and ~~a receiving means for conveying information~~
~~performing transaction of the information with between~~
the ~~service providing server~~ service-providing server

201 and the user portable telephone 209. The
communication system 407 may be ~~realized~~ designed with
two separate modules, i.e., a communication module
dedicated ~~for to the communication with the service~~
5 ~~providing server~~ service-providing server 201 and a
communication module dedicated for the communication
with the user portable telephone 209, respectively. ~~As~~
~~the~~ hard disk drive 408, ~~there may be employed include~~
a hard disk, an IC card or the like whose contents can
10 not ordinarily be rewritten freely by the user and a
memory card or the like, whose contents can freely be
rewritten by the user.
Figure 5 is a ~~functional~~ block diagram
showing ~~schematically~~ the structure of ~~the~~ user
15 portable telephone 209 employed in the system shown in
Fig. 2. The user portable telephone 209 includes a
processor 501 on which a display program 502, a use
program 503 and a user identification program 504 can
run. Connected to the user portable telephone are an
20 input button array 505, a display device 506, a radio
system 507 and a hard disk drive 508. The display
program 502, the use program 503 and the user
identification program 504 are substantially similar to
those stored in the processor 401 of the user digital
25 television described previously by reference to Fig. 4.
The input button array 505 is provided for
~~manipulating~~ controlling the portable telephone. The
display device 506 is ~~so~~ designed so as to display a

screen image by ~~dividing it~~ divided into a
frontforeground image and a backbackground image so
that ~~they~~ which can be displayed alternately with each
other. The radio system 507 is used for performing
5 information transactions of the information with the
user digital television by via radio. As ~~the~~ The hard disk
drive 508 may comprise, ~~there may be mentioned~~ a hard
disk or the like whose contents or records can not
ordinarily be rewritten freely by the user and a memory
10 card or the like whose contents can freely be rewritten
by the user.

Next, ~~Referring to Figs. 6 to 8, description~~
will be made of a processing procedure will be
described for storing the coupon information separately
15 from the advertisement information ~~upon reception of~~
when the user digital television 205 receives the
advertisement-information-appended coupon information
from the service-providing-server-service-providing
server 201. ~~by the user digital television 205.~~

20 Figure 6 is a flow-chart ~~for~~ illustrating a
processing procedure for storing the coupon information
after its separation ~~thereof~~ from the advertisement
information. At first, ~~the~~ The user digital television
205 initially receives the advertisement-information-
25 appended coupon information from the service-providing
server-service-providing server 201 (step 601). The
received image will then be, for example, such as an
example of an advertisement-information-appended coupon

received by the user digital television 205 is
illustrated in Fig. 7. As can be seen in this figure,
three pieces of coupon information are contained in the
advertisement information 701. They are coupon
5 information (1) 702, coupon information (2) 703 and
coupon information (3) 704. Subsequently, the coupon
information is separated from the received
advertisement information as received- (step 602). The
images resulting from the separation will be such as
10 are illustrated in Fig. 8. As can be seen, appended to
the advertisement information image 801 is ~~affixed as~~
appended with a comment 802 ~~messaging~~ stating that three
coupons are appended. On the other hand, ~~the~~ The coupon
information image 803 contains three pieces of coupon
15 information, i.e., coupon information (1) 804, coupon
information (2) 805 and coupon information (3) 806.
~~Subsequently~~ After being separated from one another, the
advertisement information and the coupon information
~~separated from each other~~ are stored in the hard disks
20 206 and 207, respectively, which are provided in
association with the user digital television 205 (step
603 in Fig. 6).

By storing the coupon information separately
from the advertisement information ~~upon reception of~~
25 after the advertisement-information-appended coupon
information is received in the manner described above,
it is possible to display effectively only the
advertisement information exclusively on the digital

television while ~~storing only~~ the coupon information is stored separately in the portable telephone for utilization thereof with high efficiency.

Although the foregoing description has been directed to the coupon information appended with or to the advertisement information, it should be appreciated that the teaching what is taught in of the present invention ~~server~~ can equally be applied equally to the issue or handling of the coupon information which is not appended to with any advertisement information.

Next, Referring now to Figs. 9 and 10,

~~description will be made of a processing procedure will be described in which the case where~~ the service provider sets ~~previously~~ a date of issue, a time zone of issue, ~~site concerned for~~ an issue site, ~~issue addressed person~~ the names of persons to whom coupons may be addressed, and the number of issues that may take place and at what point where the issue of the coupons is terminated when the number of the coupons issued exceeds a predetermined value.

Figure 9 is a flow-chart for illustrating processing procedure for terminating the issue of the coupon information when the number of the coupons issued exceeds a predetermined value. At first, the service provider sets the date of issue, the time zone of issue, the issue site ~~concerned for issue~~, the ~~issue addressed persons~~, the names of persons to whom coupons may be addressed, and the number of

~~issue~~ coupons to be issued (step 901 to step 905). The contents resulting from the setup mentioned-described above will be, for example, such as illustrated in Fig. 10. Subsequently, a determination is made by the

processing procedure as to whether or not the predetermined number of coupons to be issued has been reached (step 907), and the coupon information is issued on the basis of the contents determined as mentioned above (step 906). ~~wherein decision is made as to whether or not the predetermined number of coupons to be issued has been reached (step 907).~~ When the decision step 907 results in affirmation or "YES" (indicating that the predetermined number of the coupons to be issued has been reached), then the issue processing comes to an end.

In this manner, the service provider can preset the date of issue, the time zone of issue, the issue site ~~concerned for issue~~, the issue addressed ~~person~~ names of persons to whom coupons may be issued, and the number of coupons ~~that~~ can be issued, whereby ~~issue of the coupons can be terminated until the~~ termination of coupon issue occurs when the number thereof has reached a preset value.

Next, referring to Figs. 11 and 12, ~~descrip-~~ tion will be made of a processing procedure will be described for issuing the coupon information in the case wherein which the service provider broadcasts coupon information to ~~many and~~ multiple, unspecified

destinations and wherein which the coupon information is issued only when the conditions for enabling ~~receipt~~receipt of the coupon information preset by the user ~~in advance~~ are satisfied.

5 Figure 11 is a flow-chart ~~for~~ illustrating a processing procedure to achieve this end. At first, the ~~service providing server~~service providing server broadcasts the coupon information to ~~many~~multiple and unspecified digital televisions (step 1101). In

10 succession, ~~these~~each digital television acquires the ~~coupon information receiving~~conditions enabling receipt of coupon information, such as the type ~~of~~of ~~species~~of the coupon information, the discount amount, the number of use-enabled persons authorized to use the coupons, the designated store, the term of validity, etc., condition information which ~~are~~is stored in the portable telephone, ~~having~~that has been preset by the user in advance (step 1102 to step 1106).

20 The examples of conditions for receipt~~tion~~ of the coupon information as preset by the user ~~may be such~~are illustrated in Fig. 12. As can be seen in the example in this figure, there may be set, by way of example, such receipt-receipt-enabling conditions that may be set designating the type of the coupon information to be ~~is~~a discount coupon, the discount amount of which is not smaller than 200 yen, and the number of authorized users of which is at least five, the number of use-enabled persons is at least five and

so forth. Subsequently, ~~decision is made on the side~~of the digital television determines as to whether or not the coupon information broadcast satisfies all the conditions mentioned above (step 1107). In ~~the~~the case where the conditions ~~concerned~~are met, i.e., when the decision step 1107 results in "YES", the coupon information is issued (step 1108). If ~~otherwise, i.e., when the step 1107 results in a negation~~"NO" indication, no coupon information is issued.

10 In this manner, even in the case where the service provider broadcasts the coupon information to ~~many and multiple,~~ unspecified destinations, the issue of the coupon information is enabled only when the conditions preset by the user for the ~~receipt~~receipt of the coupon information are met. In other words, the user can refuse ~~receipt to receive~~of unwanted coupon information.

Next, ~~by referring next to Fig. 13,~~
15 ~~description will be made of a processing procedure will~~
be described in the case wherein which the service providing serverservice providing server acquires information concerning the number of coupons which can be issued for one user ~~to thereby so that it can then~~
issue the allowable number of coupons in an issuable
25 number.

At first, the ~~service providing~~
~~server~~service providing server acquires the number of coupons which the service provider ~~can~~determines for

one user on the basis of the ID information stored in the digital television or the portable telephone (step 1301). Subsequently, an ~~issuable~~ number of the coupons allowed to be issued to the user ~~is~~ sent to the user (step 1302). The coupon information sent in this case can be received by either the digital television or the portable telephone.

In this way, because of the ability to determine the possibility of fetching or knowing the issuable number ~~for~~ of coupons allowed to be issued to one user, a proper number of issuable coupons can be issued to the user.

~~Next,~~ Referring next to Figs. 14 to 16,

~~description will be directed to a processing procedure will be described for issuing family-oriented oriented coupon information~~ only exclusively to the representative of a family, on the condition that the representative of the family is the user, without issuing in duplicate to the while withholding from other members of the family duplicate coupon information on the condition that the representative of the family is the user.

Figure 14 is a flow-chart ~~for~~ illustrating the processing procedure to this end. Referring to the figure, the service providing server ~~service~~ providing server first acquires the information of the family of a user from the ID information stored in the digital television or portable telephone (step 1401).

For example, ~~the~~ the information of the user's family is of the user may be, for example, such as illustrated in Fig. 15. ~~In~~ First, a decision is made as to whether or not the user is the representative of the family (step 1402). ~~If~~ self this identity is confirmed, the family-oriented oriented coupon information is sent ~~only exclusively~~ to the portable telephone owned by the representative (step 1403). By contrast, in ~~the~~ case wherein which the information of the family of a child who is registered as the user has been received, and wherein which it is further ascertained that the child is not the representative of his or her family, no coupon information is issued to that child. The coupon information may be transmitted directly to the portable telephone of the representative. Alternatively, the coupon information may ~~once~~ be sent once to the digital television, ~~wherein which in turn the coupon information can be transmitted the coupon information to the portable telephone of the family representative from the digital television.~~

In this manner, by ~~setting~~ designating the representative of the family as the condition for receiving the coupon information, it is possible to issue the coupon information only to the representative of the family. Although a child (e.g. an under-age person under age) who constitutes may be identified as a member of a family, he or she is not allowed to receive

the family-~~oriented~~oriented coupon information unless the child is the specifically designated representative of his or her that family.

Next, ~~Referring next~~ to Figs. 17 and 18, ~~description will be made of a processing procedure is~~ described for updating only those items, such as discount amount, validity term or the like, that are required to be altered upon reissue of new coupon information similar to that issued ~~enbefore.~~

Figure 17 is a flow-chart ~~for~~ illustrating a processing flow. ~~At first~~Initially, the digital television receives from the service provider an update command for various conditions concerning the coupon information already issued already (step 1701).

Subsequently, on the basis of the received update command as received, the discount amount and the validity term stored in the hard disk are updated (steps 1702 to 1703). Examples of the coupon information before and after the ~~conditions~~updating of the conditions are illustrated in the ~~form of~~ tables in Fig. 18, wherein the top table shows the items before the ~~conditions~~updating of the conditions, while the bottom table shows the same items after the updating of the conditions.

In this manner, in the case where coupon information similar to the issued ~~en~~coupon information is reissued, it is possible to restrict updating only to the items required to be altered or changed.

Embodiment 2

A second embodiment of the present invention is directed to techniques for displaying issued coupon information as issued. The system configuration adopted in implementing the ~~instant~~this embodiment of the present invention is similar to that described hereinbefore by reference to Fig. 2. ~~Besides~~ ~~functional block~~ diagrams for the ~~service providing server~~service-providing server 201, the user digital television 205 and the user portable telephone 209 are also similar to those shown in Figs. 3, 4 and 5, respectively.

~~In the first place, referring to Figs. 19 to 21, description will be directed to illustrate a~~ processing procedure for displaying with priorityprimarily the coupon information in the a sequential order of time limits (coupon expiration dates) governed by the validity terms. Figure 19 shows the processing steps of this procedure~~flow to this~~ end. ~~At first, the~~ coupon information selected for display by a user through input manipulation on the user portable telephone 209 is initially extracted from the database stored in the user portable telephone ~~to be thereby displayed~~ (step 1901). Subsequently, coupon information, whose contents are ~~same as~~identical to the coupon information being displayed except for the validity term, is acquired (step 1902). An example of the relevant coupon information is illustrated in the

~~form of the~~ table in Fig. 20. In this example the case
~~of the example now under consideration,~~ the coupon
information, which is same as matches the coupon
information displayed one with regards to the title of
5 the coupon information, comment, company name, store
name, number of coupons to be issued, discount amount
and discount rate ~~is extracted~~. In a-step 1903,
~~decision is made as to the processing procedure~~
determines whether all the same-coupon information
10 matching the coupon information selected by the user,
except for the validity terms, has been acquired. If
so (i.e., when the decision step 1903 results ~~is a~~
affirmative or is a designation of "YES"), the coupon
information ~~are is~~ sorted in accordance with the
15 validity term (step 1904), ~~whereas so~~ that the coupon
information is rearranged to be displayed in the
descending order of the time limits set in the validity
terms to be displayed (step 1905). An example an
entire array of the coupon information displayed on a
20 same-screen of a portable telephone is illustrated in
Fig. 21. As can be seen in the figure, three pieces of
coupon information are displayed on a coupon
information screen 2101 in the order offset by final
limits offset designated in the validity terms.

25 In this manner, by displaying the coupon
information in the order offset by the final limits
offset determined in the validity terms, a plurality range of
acquired coupon information as acquired whose with

~~contents are same identical to coupon information the~~
user has selected, except for the validity term, can be
made use of effectively ~~in view within the parameters~~
set in of the validity terms.

5 ~~At this juncture, it should be mentioned that~~
~~through a similar processing procedure, the validity~~
term mentioned above can be replaced by the discount
rate through similar processing. In other words,
acquisition and sorting of the acquired coupon
10 information are carried out ~~with through the use of the~~
discount rate being used as the key instead of the
validity term. A result of such processing is
illustrated in Fig. 21 in the form of a screen image
2102.

15 In conjunction with the display of the coupon
information in the descending order of the discount
rates, ~~it is conceivable that there exist a plurality~~
of coupon information whose discount rates are same may
be available for acquisition. In that case, through
20 operation of a combination of relevant keys, the user
may display coupon information may be displayed with in
an order of priority based on the validity terms and,
more specifically, in the order of the ~~expiry expiration~~
dates of the coupon information in addition to the
25 descending order of the discount rates ~~by combining~~
appropriately the relevant keys.

Next, referring next to Figs. 22 and 23,
description will be made of a processing procedure will

be described for displaying on a single same image
screen the coupon information which can be used in
combination, if available, among a plurality of coupon
information.

5 Figure 22 is a flow-chart illustrating a
processing procedure to achieve this end. At first,
the coupon information selected by a user through input
manipulation on the user portable telephone 209 is
extracted from a user initially selects and extracts
10 for display coupon information from the database stored
in the user portable telephone 209 to be thereby
displayed (step 2201), whereas well as performing a
search is performed for determining whether or not
there exist the coupon information which can be
15 ~~used~~ combined in combination with the coupon
information being displayed (step 2202). For deciding
the possibility of the combination use, the table
shown in Fig. 20 is looked up accessed to determine if a
combination of coupon information is possible. More
20 specifically, in the case of the illustrated example,
the coupon information noted with "permissible" (see
Fig. 20, ninth item from the top) is the coupon infor-
mation which can be used in combination with other
displayed coupon information. Subsequently, the coupon
25 information which can be used together with the coupon
information being displayed, if it exists, is acquired
to be thereby displayed concurrently with the coupon
information being already displayed (step 2203). At

Fig. 23 illustrates an example of such concurrent
display of the usable coupon information, from both the
original coupon information display and the
"permissible" coupon information search results, on the
5 image screen of the user portable telephone 209 is
illustrated in Fig. 23. More specifically, illustrated
in Fig. 23 are two pieces of coupon information 2303
and 2304 displayed concurrently with the coupon
information 2302 initially displayed at first on the
10 display screen of the user portable telephone 209. At
this juncture, it goes without saying it is understood
that, for the user who is viewing the user digital
television 205, for the transaction purpose, the
coupons information which can be used in combination
15 may be displayed concurrently on the screen of the
display 406 of the user digital television 205.

In this way, by extracting from a plurality
of coupon information the coupon information
permitted ~~desirable~~ to be combined for the combinatory use
20 from a plurality of coupon information, the user can
use all available the coupon information can be utilized
very effectively.

Next, Referring next to Figs. 24 to 26,
description will be made of a processing procedure will
25 be described for displaying the coupon information
until the remaining number of times allowed for
enabling the display of the coupon information
expires becomes zero.

Figure 24 is a flow-chart ~~for~~ illustrating a processing procedure to achieve this end. At ~~first~~ initially, the coupon information selected and inputted by a user through input manipulation of the user portable telephone 209 is extracted from the database stored in the user portable telephone to be thereby displayed (step 2401). Subsequently, information concerning the number of display capable times (i.e., the number of times the coupon information can be displayed) is read out from the hard disk incorporated in the digital television or the portable telephone (step 2402), ~~wherein decision is made as to~~ at which point it is determined by the processing procedure whether or not the coupon information selected by the user can be displayed (step 2403). When the decision step 2403 ~~results in~~ is affirmative or a designation of "YES", then the coupon information selected by the user is displayed on the screen of the portable telephone (step 2404), and the number of display is incremented by one "+1" while with the remaining number of display capable times the coupon information can be displayed is decremented by one "-1" (step 2405). ~~At this juncture, it is understood should be mentioned that the total and remaining number of display capable times the coupon information can be displayed and the remaining number of display capable times are~~ is set in advance as typified illustrated in Fig. 25 by a record 2502 in a

table 2501, shown in the state preceding to the displaying of the coupon information, as shown in Fig. 25. In the case of the present example concerned currently, the number of display capable times the coupon information can be displayed is set to "5". In the initial state, the number of display capable times the coupon information can be displayed is "0" as indicated by a record 2503 while the remaining number of display capable times the coupon information can be displayed is "5" as indicated by a record 2504. The example in Fig. 26, there is illustrated an example of the coupon information displayed on a portable telephone image screen 2601. At this stage of the display process, the remaining number of times the coupon can be displayed ~~(i.e., remaining number of display capable times)~~ information is "4". The contents of the table, after the display of the coupon information, are ~~such as~~ illustrated in Fig. 25. As can be seen in the figure, the number of times the information was displayed is updated to "1" as indicated by a record 2506, while the remaining number of display capable times the coupon information can be displayed is updated to "4" as indicated by a record 2507. Incidentally, the information concerning the number of display capable times the coupon information can be displayed can freely be set freely by sending a copy control signal to the digital television together with the

advertisement information-appended coupon information from ~~the~~ service provider such as a broadcasting station, ~~and at~~ the same time, forgery by a third person or party can effectively be prevented.

5 As is apparent from the above, by presetting ~~in advance~~ the number of times the coupon information can be displayed, displaying of the coupon information beyond the preset number can ~~positively~~ be prevented.

~~Next, referring next to Fig. 27, description~~
10 ~~will be made of a processing procedure will be~~
~~discussed for repeatedly displaying repetitively the~~
coupon information any desired number of times until the term-of-validity term has lapsed. At first, in step

20 2701, the user accesses the database in the user
portable telephone 209 to select, extract, and display coupon information-selected for use by the user is extracted from the database to be displayed in response to the selective input manipulation of the user portable telephone 209 (step 2701), at which point, ~~wherein decision is made the processing procedure~~ determines (in step 2702) as to whether or not the final limit of the validity terms as written in the coupon information table shown in Fig. 20 (step 2702) has been reached. When this ~~decision~~-step 2702 results in ~~negation~~ a designation of "NO", the coupon information is displayed again.

~~By managing~~ When the validity term of the coupon information is managed in this manner, the

coupon information can be displayed ~~repetitively number~~ of times repeatedly so long as the final limit of the validity term has not been reached.

Next, a processing procedure for displaying
5 alternate the-coupon information and the-ID information on the image screen, in response to the input of a private ID number (password), will be described by reference to Figs. 28 to 30. Figure 28 is a flow-chart for illustrating a processing procedure to achieve this

10 end. As can be seen in the figure, after the image screen displays the desired coupon information that the user has selected (step 2801), when the user uses input button 505 to enter a private ID number into user portable telephone 209, detects the inputting of the private ID number through manipulation of the input button 505 by the user after display of the selected coupon information desired for use by the user in response to the user's selection (step 2801), causing the displayed coupon information being displayed is to be combined with the ID information (step 2802). At this juncture, it should however be added at this point that such a comparable arrangement can equally be adopted, that in this step 2802, in which the private ID number is firstly-checked first to thereby allow the user to select the coupon information desired for use, ~~whereat~~ which point the selected coupon information is displayed. The ID information table is implemented in such a form as illustration in Fig. 29. The ID

information table of Fig. 29 illustrates such an arrangement. In the case of the present example ~~new concerned, the customer's attribute information, of the customer such as his or her name, sex or the like,~~ is preset ~~previously~~ in combination with the telephone number ~~wherein~~ that is usually used for representing the ID information of the portable telephone.

Subsequently, the coupon information, combined with ~~and~~ the ID information, ~~as combined~~ are alternately displayed on the display screen 506 of the user portable telephone 209 (step 2803). ~~An example of the display of the coupon information~~ Fig. 30 illustrates the coupon information displayed as a foreground image and the ID information displayed as a background image ~~and the ID information~~ on the display screen of the portable telephone is illustrated in Fig. 30 with the coupon information being displayed as a front image while the ID information is displayed as a second image. ~~On the coupon information screen 3001, there makes appearance such descriptions appear on the coupon information screen 3001 indicating that the persons for whom the coupon information is issued are limited to the residents in "Kawasaki city", the number of persons capable receiving the bargain is "five," and others~~ as well as other descriptions. As is shown in conjunction with the example of the ID information display 3002, address-related description 3003 and description of family

composition 3004 are displayed, each enclosed by frames, displayed in combination ~~combined~~ with the description of the issue-addressed persons "residents in Kawasaki City" and the number of the use-enabled person "5," ~~are address relating description 3003 and family make-up relating description 3004 which are enclosed by frames, respectively.~~ In this way ~~way~~ combined image, the information can be displayed intelligibly so that the user can easily decide whether he or she is entitled to make use of the coupon information. ~~It this conjunction,~~ The time interval for alternately displaying alternately the images may be changed ~~in dependence depending~~ on whether the operator who inputs the private ID number is the user ~~him- or herself or alternatively~~ a third person. By way of ~~for~~ example, when the user inputs the private ID number, the time duration for displaying the ID information may be set to a length ~~which allows~~ the average amount of time the user usually needs to ascertain the ID information ~~on an average, while,~~ in the case where a third person such as a store clerk at ~~the~~ store designated ~~for use of the coupon information~~ to be eligible for coupon use, inputs the private ID number, the display time of the ID information is shortened, and so forth.

Additionally, ~~such an~~ arrangement may also be ~~adopted~~ used ~~that in which~~ the display position for the ID information as well as the size of the characters therefor may be varied ~~freely in dependence depending~~

on the preferences of the person who is in charge of
controlling the checking of the ID information.

~~Besides, for determining who inputs the user ID number~~
~~such measures may equally be adopted that the~~

5 potential operator who is going to input the private ID
number is may also be forced to selectively input select
whether he or she is an "authorized user" or a "third
person" ~~in precedence to before~~ inputting the private ID
number.

10 ~~In this manner, by virtue of that~~ Because the
ID information can be taken out extracted only after the
user entitled to use the ID information has inputted
the ID number, security of the ID information can be
much enhanced. Further, by alternately displaying

15 ~~alternately the coupon information and the ID~~
information, continuous display of the user's ID
information can be evaded avoided. Continuous display
may be avoided even in the case where when a third
person is permitted to ascertain the user's ID

20 information authenticity while simultaneously viewing
the screen image simultaneously with the user. In
this case, it can easily be checked whether or not
the user can tell ascertain the ID information without
viewing the information being displayed can easily be

25 checked, and thus accuracy or reliability of
ascertaining the authenticity of the user can be
enhanced. Additionally, concerning these items of the
ID information which meet the conditions for enabling

~~use of the coupon information, display of those items~~
of the ID information which meet the conditions for
enabling use of the coupon information thereof may be

~~omitted by regarding that confirming information for that these~~

5 ~~items have already been completed, and the~~

authenticity check may be performed only for the
remaining items. Besides, in the case of the coupon
information relating to alcoholic beverages, such
conditions are may be usually imposed, stating that "use

10 of the coupon is limited to the customers older than 20
years inclusive". When it is ascertained by checking

the ID information that this sort of these conditions
have been is not met, then display of the coupon

information may then be disabled. Alternatively, for

15 example, the user may be asked a question regarding
to the date of one's birthday in the Japanese calendar
based on may be addressed to the user on the basis of

the date of one's birth in A. D. which is being
displayed.

20 Next, a processing procedure for alternately
displaying alternately the coupon information and the
advertisement information will be described by

reference to Figs. 31 and 32. Figure 31 shows a
processing procedure to achieve this end. As can be

25 seen in the figure, the user portable telephone 209
first acquires at first the information to the effect
that the user desires to use the user's desired coupon
information, as inputted through manipulation of the

through the user's operation of the telephone's input button 505 of the telephone (step 3101), whereon at which point the coupon information is combined with the advertisement information (step 3102), and then the advertisement information and the coupon information are alternately displayed (step 3103). Examples of the advertisement information and the coupon information are illustrated in Fig. 32 on the presumption that in which the advertisement information is displayed as the ~~front~~ foreground image with and the coupon being is displayed as the ~~second~~ background image on the display screen 506. Displayed on the advertisement information screen 3201 is a message 3202 indicating that the coupon information is appended in addition to the contents of advertisement. ~~On the other hand, The~~ coupon information 3204 and 3202 that is allowed to be used ~~for use~~ are displayed on the coupon information screen 3203. ~~In this conjunction, it should be added that when~~ a plurality of advertisement information exists for single coupon information, a displaying of ~~plural multiple units of~~ advertisement information is ~~more effective desirable~~ from the standpoint of the ~~advertisement activities~~ advertisers.

As will now be appreciated from the foregoing, according to the teachings of the present invention as shown ~~incarnated~~ in the embodiments described above, relevant advertisement information is presented to the user every time the coupon information

is accessed to be used, which means that the opportunity ~~effor~~ the advertisement ~~being observed~~ to be seen or read by the user can be significantly be increased. ~~Besides~~ Furthermore, when the validity term of the coupon information has expired, display or presentation of advertisement information can be disabled on the basis of the expiration date information of ~~date~~ stored in the portable telephone, which ~~in turn~~ means that the necessity of storing the in the hard disk of the portable telephone, or the like, large amounts of advertisement information data, generally of large data amount as in the case of the such as image or graphic data, in the hard disk of the portable telephone or the like can be mitigated reduced or evaded avoided.

~~In practical applications where~~ When the displayed coupon information, as shown in previous descriptions of embodiments of the present invention, ~~displayed according to the teachings of the invention~~ is actually used by the user, the coupon information and the user's ID information, both stored in the portable telephone or the like, are sent in combination to a store which is designated to handle the coupon. The information composed of the combined coupon information and user's ID information is transferred to the ~~business enterprise~~ which issued that coupon information. Thus, the business enterprise can ~~gather collect specific types~~ of coupons as used as well as

profile the users' traits, of the users such as
genders, age, generation or the like, and the business
enterprise can make efficient use of the acquired
information for the marketing purposes activities.

5 The present invention thus provides the
advantages of enhancing the efficiency of issuing
coupon information to users effect that by issuing the
coupon information in such manner that satisfies the
prescribed conditions, are satisfied, issue of the
10 coupon information to the users can be realized with
enhanced efficiency.

Furthermore Besides, according to the
teachings of the present invention, utilization the
efficiency of the coupon use can be remarkably be
15 increased by displaying, on the image screen of a
portable telephone or the like, the coupon information,
on the image screen of the portable telephone or the
like together with important or interesting items such
as the validity terms, the discount rates, and the
20 like.

It should be further understood by those
skilled in the art that the foregoing description has
been made of a embodiments of the invention and that
various changes and modifications may be made to the
25 invention without departing from the spirit of the
invention and the scope of the appended claims.

ABSTRACT OF THE DISCLOSURE

The present invention relates to a A coupon
information issuing system coupon information issuing
system capable of issuing even a plurality of coupon
information to a user who has satisfied the conditions
for issue. After conditions for issuing coupon
information are preset, and when a request by a user
for issue of coupon information is submitted and
fulfills these preset conditions, a service providing
server issues the coupon information. The issued
coupon information is transmitted and is displayed on a
digital television. When conditions for issuing coupon
information to which request for issue is designated by
user are preset, a service providing server service
providing server issues the coupon information in
accordance with the conditions for the issue. The
issued coupon information is transmitted to a digital
television to be displayed thereon. The displayed
coupon information is downloaded to a portable
telephone of the user for utilization.